UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,386	05/03/2006	Helmut Jerg	2003P01287WOUS	1892

46726 7590 04/28/2010

BSH HOME APPLIANCES CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
100 BOSCH BOULEVARD
NEW BERN, NC 28562

EXAMINER	
RIGGLEMAN, JASON PAUL	
ART UNIT	PAPER NUMBER
1711	

NOTIFICATION DATE	DELIVERY MODE
04/28/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

NBN-IntelProp@bshg.com

Office Action Summary	Application No.	Applicant(s)	
	10/578,386	JERG ET AL.	
	Examiner	Art Unit	
	JASON P. RIGGLEMAN	1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 January 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-42* is/are pending in the application.

4a) Of the above claim(s) *40 and 42* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-29, 31-36, 38-39, 41* is/are rejected.

7)☒ Claim(s) *30 and 37* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☒ Other: *Foreign reference*.

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 40 and 42 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the limitation of multiple planes of parallel spray channels is a distinct species from the original as is placement of the spray channels in all of the bottom, top, and sides of the container.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 40 and 42 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/19/2010 has been entered.

Status of Claims

3. Applicant's reply, filed 1/19/2010, has been received. Current pending claims are 11-42. No claims are amended. Claims 1-10 are cancelled. Claims 22-42 are new.

Response to Arguments

4. Applicant's arguments filed 1/19/2010 have been fully considered. In regards to the 112, 2nd paragraph, rejection of claims 11, 13, and 20, the rejections are maintained. In regards to

claim 11, the applicant cites pg. 4, lines 6-13; however, this does not clarify "pressurized manner". Further, it should be noted that a 2nd distributor is not in claim 11 and is an alternative embodiment. In claim 20, the applicant has referred to a verbatim quotation of the claim in the specification to argue that the claim is not indefinite. In claim 13, the applicant merely asserts that it is not indefinite. To say a "pressurized rinsing liquid" is as indefinite as saying a "pressurized manner".

5. In regards to the 102(b) rejection, the applicant argues that Lutolf "does not teach at least one distributor for regulating the supply of rinsing liquid to the at least one spray channel. Applicant argues that the check valves 60, 80, of Lutolf do not regulate the supply of rinsing liquid to the pipe system 3 and instead "restrict flow back from the pipe system toward the pipes 55 and 77". Examiner disagrees. Even if the valves are merely check valves they still *regulate* the supply of rinsing liquid; therefore, the rejections are maintained on these grounds. If the valves open/shut – pressure is variable. The applicant's arguments that Lutolf does not teach open spray ends is not persuasive. The Lutolf reference teaches ends in which liquid can be supplied – they are "open". The applicant has failed to amend the original claims and the language of the claims is extremely broad. The arguments are moot since a new grounds of rejection is being made based on the new search.

6. The applicant argues with the motivation with the previous 103 (a) rejections by stating that it would not be obvious to one of ordinary skill in the art to create an alternating spray pattern. Examiner points to Deuser et al. (UK Patent Application Publication No. 2003840) which illustrates the pervasive use and motivation for alternating spray patterns – in particular for washing 3-D objects such as containers. The remainder of the applicant's arguments appear

to be quotations of the claims and assertions that the prior art does not teach -- these arguments are not proper. The arguments are moot since a new grounds of rejection is being made based on the new search and to provide support for the use of case law. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Claim Objections

7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the selection of one of a movement and a to-and-fro motion in claim 12 is not supported by the specification. Therefore, this limitation should be incorporated into the specification.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 11, 15, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "and having two open ends via which rinsing liquid can be supplied in a pressurized manner" is not understood. The phrase "is one of a plurality of spray channels that are aligned parallel to one another at least on the bottom of the rinsing container" is not understood. In regards to claim 15, the phrase "which has a first open end is cach coupled" is not understood.

10. The term "pressurized manner" in claim 13 is a relative term which renders the claim indefinite. The term "pressurized manner" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Note: the applicant appears to be calling a plate-type valve feeding a manifold a -- "distributor".

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

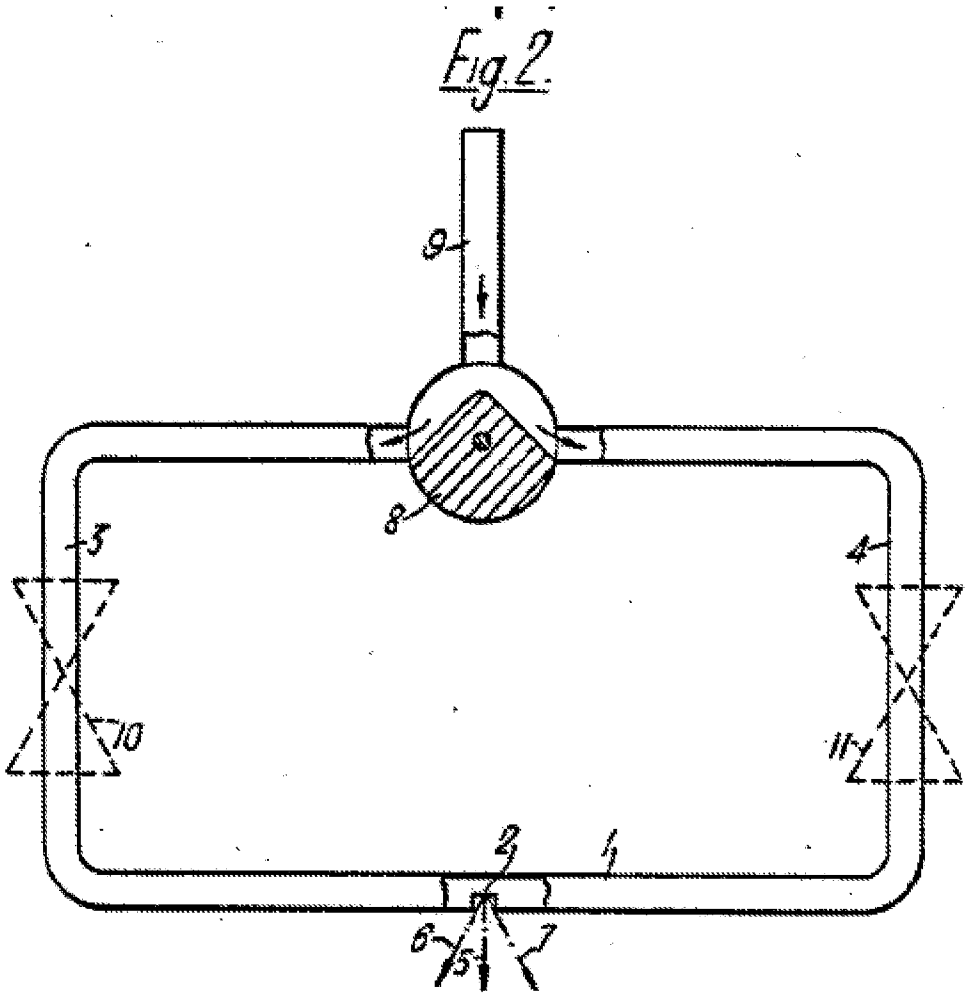
> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 11, 14, 18-19, and 21 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Lutolf (FR2285838) in view of Van Dijck (US Patent No. 2654894) in view of Steen (GB Patent Publication No. GB949954).

13. Lutolf teaches a dishwasher having a spray device including spray channel (3) and distributors, valves (80) (60), feeding the spray channel (3) which cooperate to *regulate* a quantity of rinsing liquid supplied to the spray channel (3) and a pressure of the rinsing liquid in parts of the spray channel. The spray channel has two open ends (each open end connects to the open valve) which rinsing liquid can be supplied in pressurized manner, see Figure. The pressure is variable -- by means of the valves (80) (60). The rinsing container (1) is trough-shaped. The valves have one opening (*inherent*) in which liquid can be supplied in a pressurized

manner via an open end of the spray channel in a predetermined position of the distributor. The openings (see spray patterns) are necessarily configured over a predetermined arc segment.

14. In the alternative, Lutolf does not teach that the check valves (60)(80) cooperate to *regulate* the flow of liquid to the spray channels; however, Van Dijck teaches a cleaning device in which a conduit (20) is supplied at each end by a distributor (valves 48 & 53), Fig. 1. Van Dijck teaches that "the degree of turbulence of the liquid may be increased by opening both valves 48 and 53, or they (either of them) may be rhythmatically opened and closed to provide surges of liquid" (Column 4, Lines 59-64). Further, Steen teaches feeding liquid under pressure, towards one another, two columns of liquid which collide to create a lateral spray at the point of collision to create pulsating pressure actions of different phase (Lines 24-39).



15. The pulsing permits fine control of the angle of spread of the spray (Lines 45-50), see Fig. 2, inserted into text, above. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf with the teachings of Van Dijck and Steen to create a washing machine in which there is fine control of the pulsing of the spray -- which is especially useful in a system with a stationary spray system -- to effectively wash the dishes and achieve the expected result.

16. Claims 12-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutolf (FR2285838) in view of Van Dijck (US Patent No. 2654894) in view of Steen (GB Patent Publication No. GB949954) and further in view of Bolla (CH571852).

17. Lutolf teaches a dishwasher having a spray device including spray channel (3) and distributors, valves (80) (60), feeding the spray channel (3) which cooperate to *regulate* a quantity of rinsing liquid supplied to the spray channel (3) and a pressure of the rinsing liquid in parts of the spray channel. The spray channel has two open ends (each open end connects to the open valve) which rinsing liquid can be supplied in pressurized manner, see Figure. The pressure is variable -- by means of the valves (80) (60). The rinsing container (1) is trough-shaped. The valves have one opening (*inherent*) in which liquid can be supplied in a pressurized manner via an open end of the spray channel in a predetermined position of the distributor. The openings (see spray patterns) are necessarily configured over a predetermined arc segment.

18. In the alternative, Lutolf does not teach that the check valves (60)(80) cooperate to *regulate* the flow of liquid to the spray channels; however, Van Dijck teaches a cleaning device in which a conduit (20) is supplied at each end by a distributor (valves 48 & 53), Fig. 1. Van Dijck teaches that "the degree of turbulence of the liquid may be increased by opening both valves 48 and 53, or they (either of them) may be rhythmatically opened and closed to provide surges of liquid" (Column 4, Lines 59-64). Further, Steen teaches feeding liquid under pressure, towards one another, two columns of liquid which collide to create a lateral spray at the point of collision to create pulsating pressure actions of different phase (Lines 24-39).

19. The pulsing permits fine control of the angle of spread of the spray (Lines 45-50), see Fig. 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf with the teachings of Van Dijck and Steen to create a washing machine in which there is fine control of the pulsing of the spray -- which is especially useful in a system with a stationary spray system -- to effectively wash the dishes and achieve the expected result.

20. Lutolf as modified by Van Dijck, as modified by Steen does not teach the periodic movement of the distributor; however, Bolla teaches a distributor (8) which is movable relative to a spray channel in a movement, Figs. 1-2. There is a drive means for driving the distributor in periodic movement. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf, as modified by Van Dijck, as modified by Steen, with Bolla to create a dishwashing machine with an automated-alternating spray pattern with fine control to achieve the expected result.

21. Claims 12-13, 16, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutolf (FR2285838) in view of Van Dijck (US Patent No. 2654894) in view of Steen (GB Patent Publication No. GB949954) and further in view of Perry (US Patent No. 6003529) and Deuser et al. (UK Patent Application Publication No. 2003840).

22. Lutolf teaches a dishwasher having a spray device including spray channel (3) and distributors, valves (80) (60), feeding the spray channel (3) which cooperate to *regulate* a quantity of rinsing liquid supplied to the spray channel (3) and a pressure of the rinsing liquid in parts of the spray channel. The spray channel has two open ends (each open end connects to the open valve) which rinsing liquid can be supplied in pressurized manner, see Figure. The pressure is variable -- by means of the valves (80) (60). The rinsing container (1) is trough-

shaped. The valves have one opening (*inherent*) in which liquid can be supplied in a pressurized manner via an open end of the spray channel in a predetermined position of the distributor. The openings (see spray patterns) are necessarily configured over a predetermined arc segment.

23. In the alternative, Lutolf does not teach that the check valves (60)(80) cooperate to *regulate* the flow of liquid to the spray channels; however, Van Dijck teaches a cleaning device in which a conduit (20) is supplied at each end by a distributor (valves 48 & 53), Fig. 1. Van Dijck teaches that "the degree of turbulence of the liquid may be increased by opening both valves 48 and 53, or they (either of them) may be rhythmatically opened and closed to provide surges of liquid" (Column 4, Lines 59-64). Further, Steen teaches feeding liquid under pressure, towards one another, two columns of liquid which collide to create a lateral spray at the point of collision to create pulsating pressure actions of different phase (Lines 24-39).

24. The pulsing permits fine control of the angle of spread of the spray (Lines 45-50), see Fig. 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf with the teachings of Van Dijck and Steen to create a washing machine in which there is fine control of the pulsing of the spray -- which is especially useful in a system with a stationary spray system -- to effectively wash the dishes and achieve the expected result.

25. Lutolf as modified by Van Dijck as modified by Steen does not teach the to-and-fro movement of the distributor in alternating directions and the drive means ; however, Perry teaches a plate-type distributor (valve 40) which is movable related to the spray channel in a displacement movement in alternating directions, Fig. 2. There is a drive means for driving the distributor in periodic movement. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf as modified by Van Dijck as modified by Steen with

Perry to create a dishwashing machine with an alternating spray pattern to achieve the expected result. Deuser et al. illustrates the pervasive use and motivation for alternating spray patterns – in particular for washing 3-D objects such as containers.

26. Claims 17, 23-29, 31-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutolf (FR2285838) in view of Van Dijck (US Patent No. 2654894) in view of Steen (GB Patent Publication No. GB949954) and further in view of Perry (US Patent No. 6003529) and Deuser et al. (UK Patent Application Publication No. 2003840) and Hamilton (US Patent No. US3512539).

27. Lutolf teaches a dishwasher having a spray device including spray channel (3) and distributors, valves (80) (60), feeding the spray channel (3) which cooperate to *regulate* a quantity of rinsing liquid supplied to the spray channel (3) and a pressure of the rinsing liquid in parts of the spray channel. The spray channel has two open ends (each open end connects to the open valve) which rinsing liquid can be supplied in pressurized manner, see Figure. The pressure is variable -- by means of the valves (80) (60). The rinsing container (1) is trough-shaped. The valves have one opening (*inherent*) in which liquid can be supplied in a pressurized manner via an open end of the spray channel in a predetermined position of the distributor. The openings (see spray patterns) are necessarily configured over a predetermined arc segment.

28. In the alternative, Lutolf does not teach that the check valves (60)(80) cooperate to *regulate* the flow of liquid to the spray channels; however, Van Dijck teaches a cleaning device in which a conduit (20) is supplied at each end by a distributor (valves 48 & 53), Fig. 1. Van Dijck teaches that "the degree of turbulence of the liquid may be increased by opening both valves 48 and 53, or they (either of them) may be rhythmatically opened and closed to provide surges of liquid" (Column 4, Lines 59-64). Further, Steen teaches feeding liquid under pressure,

towards one another, two columns of liquid which collide to create a lateral spray at the point of collision to create pulsating pressure actions of different phase (Lines 24-39).

29. The pulsing permits fine control of the angle of spread of the spray (Lines 45-50), see Fig. 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf with the teachings of Van Dijck and Steen to create a washing machine in which there is fine control of the pulsing of the spray -- which is especially useful in a system with a stationary spray system -- to effectively wash the dishes and achieve the expected result.

30. Lutolf as modified by Van Dijck as modified by Steen does not teach the to-and-fro movement of the distributor in alternating directions and the drive means ; however, Perry teaches a plate-type distributor (valve 40) which is movable related to the spray channel in a displacement movement in alternating directions, Fig. 2. Further, the valve is a variable valve and can control the flow rate to between *fully open, fully closed, or any flow rate there between* (Column 1, Lines 59-61). There is a drive means for driving the distributor in periodic movement. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf as modified by Van Dijck as modified by Steen with Perry to create a dishwashing machine with an alternating spray pattern to achieve the expected result. Deuser et al. illustrates the pervasive use and motivation for alternating spray patterns – in particular for washing 3-D objects such as containers.

31. Lutolf as modified by Van Dijck as modified by Steen with Perry does not teach the distributor having a drive slot and driven by a rotary disk; cam arranged on the rotary disk and engaging the drive slot in the distributor; however, Hamilton teaches a drive means in which a shaft is reciprocated in to-and-fro movement by a drive slot (105) driven by a rotary disk (crank

wheel 99) and the cam (pin 101) is arranged on the rotary disk and engages the drive slot to cause movement, (Column 3, Lines 44-53), Fig. 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf as modified by Van Dijck as modified by Steen with Perry with Hamilton to have a automated reciprocating distributor to create a fine spray pattern to achieve the expected result.

32. Claims 38-39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutolf (FR2285838) in view of Van Dijck (US Patent No. 2654894) in view of Steen (GB Patent Publication No. GB949954) and further in view of Perry (US Patent No. 6003529) and Deuser et al. (UK Patent Application Publication No. 2003840) in view of Mahoney (US Patent No. 2239110).

33. Lutolf teaches a dishwasher having a spray device including spray channel (3) and distributors, valves (80) (60), feeding the spray channel (3) which cooperate to *regulate* a quantity of rinsing liquid supplied to the spray channel (3) and a pressure of the rinsing liquid in parts of the spray channel. The spray channel has two open ends (each open end connects to the open valve) which rinsing liquid can be supplied in pressurized manner, see Figure. The pressure is variable -- by means of the valves (80) (60). The rinsing container (1) is trough-shaped. The valves have one opening (*inherent*) in which liquid can be supplied in a pressurized manner via an open end of the spray channel in a predetermined position of the distributor. The openings (see spray patterns) are necessarily configured over a predetermined arc segment.

34. In the alternative, Lutolf does not teach that the check valves (60)(80) cooperate to *regulate* the flow of liquid to the spray channels; however, Van Dijck teaches a cleaning device in which a conduit (20) is supplied at each end by a distributor (valves 48 & 53), Fig. 1. Van

Dijck teaches that "the degree of turbulence of the liquid may be increased by opening both valves 48 and 53, or they (either of them) may be rhythmatically opened and closed to provide surges of liquid" (Column 4, Lines 59-64). Further, Steen teaches feeding liquid under pressure, towards one another, two columns of liquid which collide to create a lateral spray at the point of collision to create pulsating pressure actions of different phase (Lines 24-39).

35. The pulsing permits fine control of the angle of spread of the spray (Lines 45-50), see Fig. 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf with the teachings of Van Dijck and Steen to create a washing machine in which there is fine control of the pulsing of the spray -- which is especially useful in a system with a stationary spray system -- to effectively wash the dishes and achieve the expected result.

36. Lutolf as modified by Van Dijck as modified by Steen does not teach the to-and-fro movement of the distributor in alternating directions and the drive means ; however, Perry teaches a plate-type distributor (valve 40) which is movable related to the spray channel in a displacement movement in alternating directions, Fig. 2. Further, the valve is a variable valve and can control the flow rate to between *fully open, fully closed, or any flow rate there between* (Column 1, Lines 59-61). There is a drive means for driving the distributor in periodic movement. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf as modified by Van Dijck as modified by Steen with Perry to create a dishwashing machine with an alternating spray pattern to achieve the expected result. Deuser et al. illustrates the pervasive use and motivation for alternating spray patterns – in particular for washing 3-D objects such as containers.

37. Lutolf as modified by Van Dijck as modified by Steen with Perry does not teach the parallel alignment of the spray channels on the bottom of the rinsing container; however, Mahoney teaches multiple parallel spray channels in the bottom of the rinsing container, Fig. 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf as modified by Van Dijck as modified by Steen with Perry with Mahoney to have a distributor which uniformly (by means of multiple spray tubes) conveys a fine spray pattern to achieve the expected result.

38. Claims 11-16 and 18-21 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Bolla (CH571852) in view of Steen (GB Patent Publication No. GB949954).

39. Bolla teaches a dishwasher having a spray device including parallel spray channels (10) and a distributor distributors feeding the spray channels (3) which *regulates* a quantity of rinsing liquid supplied to the spray channel (3) and a pressure of the rinsing liquid in parts of the spray channel. The spray channel has at least one open end. The pressure is variable -- by means of the distributor. The rinsing container is not taught as trough-shaped; however, it is widely known in the art to use such a container – see Lutolf (FR2285838) The distributor has one opening in which liquid can be supplied in a pressurized manner via an open end of the spray channel in a predetermined position of the distributor. The openings (see spray patterns) are necessarily configured over a predetermined arc segment. The distributor (8) is movable relative to a spray channel in a movement, Figs. 1-2. There is a drive means for driving the distributor in periodic movement.

40. Bolla does not teach that use of two distributors nor two open ends on the spray channels; however, Steen teaches feeding liquid under pressure, towards one another, two columns of

liquid which collide to create a lateral spray at the point of collision to create pulsating pressure actions of different phase (Lines 24-39). The pulsing permits fine control of the angle of spread of the spray (Lines 45-50), see Fig. 2, inserted into text, above. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bolla with the teachings of Steen, hence creating a dual-distributor system with two open ends on the spray channels to create a washing machine in which there is fine control of the pulsing of the spray -- which is especially useful in a system with a stationary spray system -- to effectively wash the dishes and achieve the expected result.

Allowable Subject Matter

41. Claims 30 and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

42. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach the plate-shaped distributor with a plurality of openings for coupling with a plurality of first open ends – the closest art is Bolla which is not plate-shaped and does not move in a to-and-fro movement.

Conclusion

43. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Crane et al. (US Patent No. 4738222) teaches “open” ends on a washing device spray tube.

44. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON P. RIGGLEMAN whose telephone number is (571)272-5935. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/
Supervisory Patent Examiner, Art Unit 1711

Jason P Riggleman
Examiner
Art Unit 1792

/J. P. R./
Examiner, Art Unit 1792